

REMARKS

The Office Action and prior art relied upon have been carefully considered. In an effort to expedite the prosecution, claims 1-10 have been written as claims 11-20. Applicant notes the indicated allowability of claim 5. All of the new claims submitted for the Examiner's consideration are believed to avoid the prior rejections under 35 USC § 102, 103 and 112 and are therefore believed to be in condition for allowance.

In reviewing the prior art relative to the new claims, the Examiner is reminded that March 3, 2000 is the earliest priority date derived from the priority document to the PCT application PCT/AU00/01041.

The presently claimed invention addresses the problem of enzymatic discoloration in peeled or sliced fruits and vegetables where the flesh usually covered by skin is exposed and quickly becomes discolored.

The claimed invention is based on the discovery that extracts and chemical compounds of the flavonoid family inhibits this discoloration. Flavonoids are colored compounds (usually yellow derived from the flavone group and are a distinct subgroup of the large class of poly phenols. Flavonoids are usually derived from fruit skins and seeds.

In the examination of the new claims, the Examiner should take note of the definition of the term "minimally processed" at page 2, lines 7-9; and "flavonoid" at page 3, lines 10-15 and page lines 14-26. The definitions are incorporated by reference in the new claims.

The following comments pertain to the prior art cited by the Examiner and they highlight the distinguishing characteristics of the claimed invention.

Sardo (6403139)

This patent discloses the use of tocopherol which is not a flavonoid to prevent scald in harvested apples and pears. The apples and pears or other vegetables are **not**

minimally processed because they are not peeled or sliced. Thus Sardo is not addressing the problem addressed by this invention. Sardo makes no mention of flavonoids. The only possible reference is that in the comparative example a dipping solution uses a concentrated spinach extract which is said to contain polyphenols. These compounds are not flavonoid polyphenols as they are not derived from fruit skins or seeds.

When read in context the polyphenol spinach extract would not be seen by one skilled in the art as being recommended by Sardo. The dipping solution was only 70% effective with unpeeled apples after 8 days whereas the present invention was 100% effective on peeled apples after at least 17 days (see page 6, lines 11, 12).

Tsurata JP362126931

Again this disclosure treats whole raw vegetables not peeled or cut vegetables. Tsurata states that the purpose of coating the vegetable is to sterilize the vegetable against coli bacillus. The preservation of unpeeled fruits and vegetables is much simpler than the preservation of cut and peeled fruits and vegetables. A skilled worker would not find a suggestion in this specification that the coating could be used on cut and peeled vegetables or fruit.

Kumami JP 402100660

This disclosure makes no mention of cut and peeled fruits or vegetables. The only examples mentioned are ham or sausage. Again one skilled in the art would not find anything in Kumami to give them confidence to try flavonoids with peeled and cut fruits and vegetables.

Sardo French 9603100

This disclosure addresses the same post harvesting preservation as the Sardo US patent mentioned above. Sardo does suggest that polyphenols can be used in addition to a

terpene compound which is identified as the prime antioxidant. Again one skilled in the art would not find any suggestion in this specification that would suggest treating peeled and cut fruits or vegetables with a flavonoid.

Sono JP 408332024

This specification does not address the problem of preserving cut and peeled vegetables from discoloration. Rather it is to a method of treating whole fruits and vegetables prior to drying. No mention is made of flavonoids and there is no indication that the polyphenols are flavonoids.

McArdle USA 6365212

McArdle has an effective date of April 3, 2000 (after the earliest priority date of this case) and was not published before the earliest priority date or filing date of this application.

This disclosure improves the color of orange juice by adding dried orange peel (excluding the white rind). Flavonoids are present in the rind but the flavonoid content is at the same concentration as in the rind and is not increased to the concentration levels required in this invention.

There is no suggestion that:

1. the flavor and quality other than color is improved
2. that flavonoids from other plant sources could be used.

For the foregoing reasons, newly added claims 11-20 are believed to be allowable.

In view of the above, consideration and allowance are, therefore, respectfully solicited.

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In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to CBLH Deposit Account No. 22-0185.

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Respectfully submitted,

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